ABSTRACT

[0034] A system and method for communicating information between two locations via a wireless microwave link is provided. The system includes at least two antennas, each to transmit information as a narrow beam signal to be directed toward a focal point at a remote location. The antennas include at least one antenna to transmit a narrow beam signal toward a redirection point different from the focal point. A redirection device is located at the redirection point to receive the narrow beam signal from the at least one antenna element and to redirect the received narrow beam signal toward the receiver. The redirection point is located such that the narrow beam signals from the at least two antenna elements converge and overlap to form proximate to the receiver, an interference pattern that includes peaks and nulls having a peak-to-peak spacing narrower than the width of each received narrow beam signal.